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Our Public Lands

For The Third Century...

A

LEGISLATIVE
MANDATE

See Page 3



U.S. DEPARTMENT OF THE
INTERIOR

BUREAU OF LAND MANAGEMENT
Curt Berklund, Director

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

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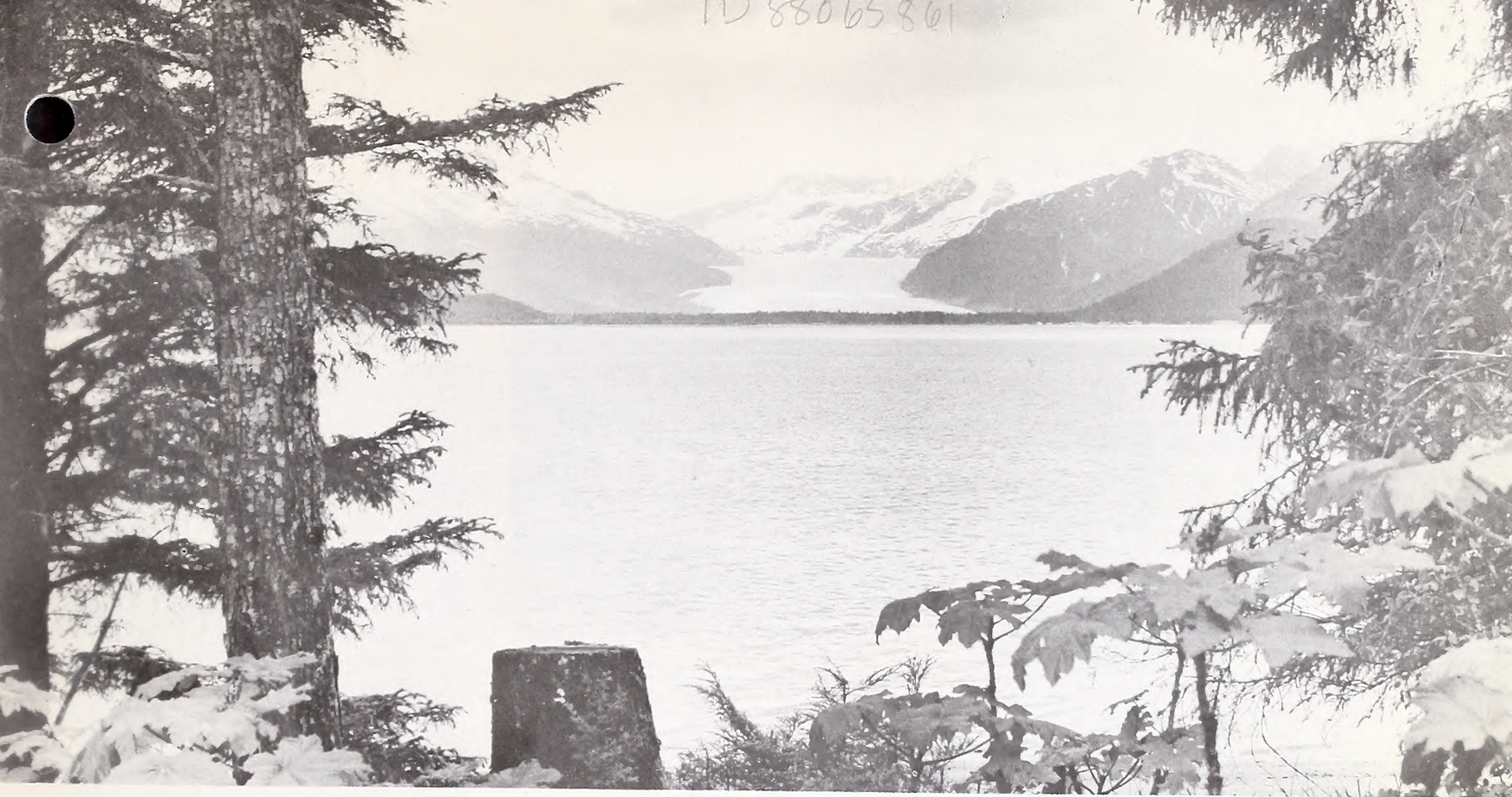
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Our Public Lands

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For the Third Century - A Legislative Mandate

The 94th Congress Gave the Bureau an Organic Act for the Management of the Public Lands During the Third Century

ELEANOR SCHWARTZ

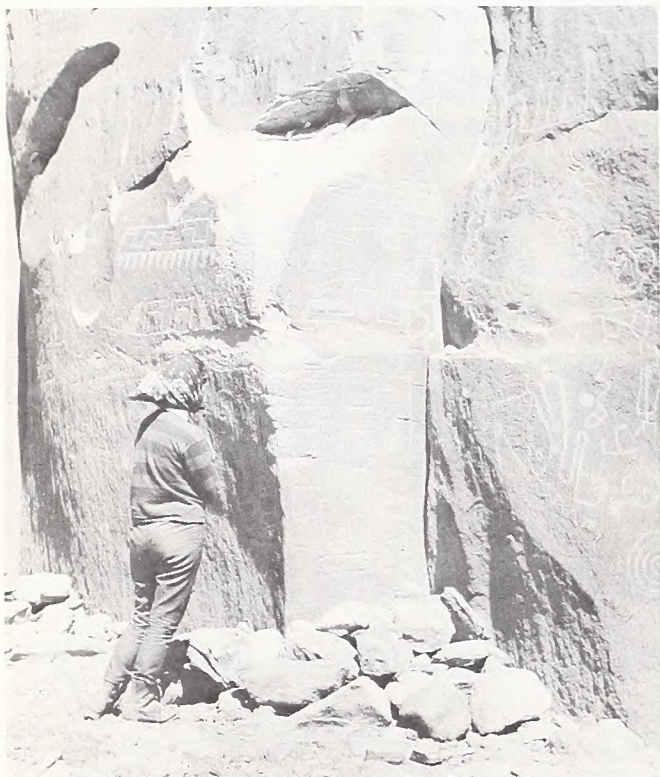
Chief, Division of Legislation
and Regulatory Management

The Federal Land Policy and Management Act of 1976, passed in the closing hours of the 94th Congress, may prove to be the most significant piece of land legislation enacted within this century. It is the first clear-cut mandate Congress has ever given to the Bureau of Land Management for the administration of the 473 million acres of Federal lands under its jurisdiction. In acres, this is more land than is held by all the other Federal agencies combined.

Most of this land is what is left of the Nation's public domain. Public domain lands are defined as land that has never been in private ownership. At one time or

another more than 1.8 billion acres of the 2.3 billion acres of land that now makes up the 50 United States was a part of the public domain. That was the bulk of all land west of the Appalachian Mountains. The public domain provided the land that now makes up many of our National Parks, National Wildlife Refuges, National Forest, Defense installations and the holdings of other Federal agencies, but the greater part of the public domain passed into private ownership during the course of westward expansion and settlement.

The 473 million acres that are left are an additional land base to be used in the National interest



and in the public benefit. These lands have been called "unappropriated" because they have never been designated for a special purpose as have the National Parks and National Forest. They have also been called "Our Last Frontier."

As settlers moved into the West the public lands and public land resources contributed to the economic well-being of western communities. Mining, lumbering and ranching soon became the traditional uses of the public lands and the wildlife attracted hunters and fishermen. These traditional uses dominated public land policy and thinking for many years.

Before the passage of the Taylor Grazing Act in 1934 there was little regulation and no management. Most authorities believed that all public land would eventually pass into private ownership and therefore, any money spent for management would be lost.

Nevertheless, conditions on the public range reached such a state by the 1930s that ranchers were demanding action.

Congress responded by passing the Taylor Grazing Act which provided the first program of active management of public domain lands. However, the Act was limited in scope and objectives. It was designed solely to regulate livestock grazing and to improve the productive capacity of the public range, and it recognized a single constituency — the domestic livestock operator.

New winds of change were starting to blow by the 1950s as a host of new users and uses started to compete with the traditional users for space and public land resources. As a result of the growing popularity of the public lands, the Bureau's responsibilities and programs became vastly more complicated.

Today the Bureau administers one of the most complex land management programs of any agency within the Federal Government. It is the custodian of original patent and survey records for 30 of the 50 United States. It is the final authority on all survey matters involving land within, or once a part of, the public domain.

It administers the mineral leasing program on all lands under its jurisdiction, on the Outer Continental Shelf, on lands held by other Federal agencies and on private lands whose mineral rights are reserved to the Federal Government. It manages the recreational resources of the public lands and is responsible for the protection and development of cultural resources on the public lands. It manages wildlife habitat on land under its jurisdiction and is responsible for the protection, management and control of wild horses on the public lands. It manages timber resources on 2 million acres of prime Douglas fir forest lands in western Oregon and on 23 million acres of other commercial forest lands in other public land states. It is responsible for fire protection on BLM land and works closely with the Forest Service and other Federal and State agencies in cooperative interagency fire suppression. It is responsible for the disposal of land under its jurisdiction and of the public domain land held by other Federal agencies. It is also responsible for land exchanges in support of the programs of other Federal agencies and for the granting of rights-of-way across Federal lands and for the construction of pipelines, electric transmission lines and other public utilities.

In light of its multiple responsibilities and the complexity of its programs, the Bureau has long needed a Congressional statement of policy and modern legislative mandate and authority for the active coordinated management of the public lands. The role of Congress in providing this mandate is clearly set forth in Article 4, section 3, clause 2 of the Constitution. The 94th Congress has met this Constitutional responsibility in the Federal Land Policy and Management Act.

The first public domain was created in 1780 when New York State surrendered its claim to western lands in favor of the Federal Government. Other colonies followed New York's example and by 1802 all of the original states having such claims

had ceded their western lands beyond the Appalachian Mountains to the Central Government. Thereafter lands acquired in the course of national expansion were considered as public domain — belonging to all the people of the United States.

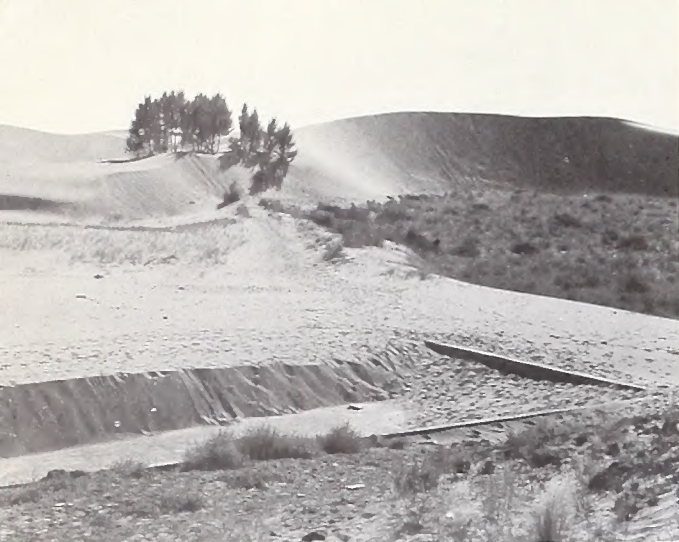
In 1812 Congress established the General Land Office to administer the public lands. Later this office was combined with the U.S. Grazing Service to create the present-day Bureau of Land Management. In 1946 the Bureau became responsible for all programs pertaining to the unappropriated public lands.

While the Bureau had jurisdiction over the largest area of public lands and administers one of the most varied management programs of all the Federal land agencies it lacked a clear-cut legislative mandate for its programs and policies. The Congress had passed the first laws pertaining to the public domain while we were still fighting the American Revolution. Since that time thousands of public land laws have been enacted. A good portion of these laws were passed to meet a special situation peculiar to a given period of our history. Out of these thousands of laws pertaining to the public lands few were ever repealed. A report made by the Public Land Law Review Commission in 1964 lists 2,669 laws that still have some bearing on the administration of the public lands.

In time this piece-meal approach to public land legislation created a legal jungle that would strike trepidation in the heart of the fabled Philadelphia Lawyer. It created a situation where managers and administrators were forced to hack away at the legal entanglements in their efforts to provide programs and policies that were responsive to the needs of the American public. It also created a situation where change had to come through executive order rather than through Congressional action.

From the time the Bureau of Land Management was created in 1946 successive Presidents have called for a legislative reform and





consolidation of the public land laws. Congress has now responded to that request.

In its preamble, the Act declares that with an exception for individual tracts which may be disposed of in the National interest, it is the policy of the United States to retain its public lands in Federal ownership. Congress had already enunciated the policy of Federal retention of the unappropriated public lands in 1964 when it passed three laws pertaining to the public lands. In two of these Acts, the Classification and Multiple Use Act (88-607) and in the legislation establishing the Public Land Law Review Commission (88-606) Congress stated the probability that the public lands would remain in public ownership. However, each of these Acts was enacted as interim legislation pending the report of the Public Land Law Review Commission and expired in 1970. The policy of retention was a reversal of the policy of disposal that dated back to the Revolution.

Although Alexander Hamilton and Thomas Jefferson championed widely divergent views about the role of the public domain in the Nation's future, both men thought that all public land would eventually pass into private ownership.

Hamilton wanted to sell public land to raise Federal revenue. Jefferson favored a more liberal disposal policy and advocated giving parcels of public land to landless citizens based on need. Prior to 1862 the Hamiltonian view prevailed, then Congress passed the Homestead Act intended to provide land to any settler who was willing to live on the land and bring virgin soil under cultivation.

There was sound reasoning behind the disposal philosophy as long as there was an abundance of agricultural land in the public domain or land that could profitably be put to private use. In the years that followed the Revolution and down to relatively recent times Congress has enacted many laws pertaining to the disposal of the public domain. It was the intent of these laws to encourage development and settle-

ment in the sparsely or unsettled areas of the Nation.

The sale of public land eventually approached 303 million acres. More than 287 million acres were claimed under the Homestead Act and grants to the States for all purposes totaled 328 million acres. Land was also granted to military, to railroads or sold under a variety of other laws. All told 1,144,100,000 acres of public land has passed out of Federal ownership during the 200 years of our national existence.

It was the working of the disposal system that eventually gave birth to the concept of retention. In each case those who acquired a parcel of public land tried to select land that was best suited to their particular need. Homesteaders looked for good agricultural land, miners looked for mineral lands, etc. And in each case the land that was left in public ownership was the land less suited for private use — lands too dry, too steep, too rocky, or too infertile to provide a profitable return to a private owner.

But there were also other reasons why Congress adopted a retention policy. During the last decade there had been great changes in public attitudes. A concern for environmental values and open space had slowly replaced the concern for development and increased production. There had also been a growing realization that frail lands may best serve the public interest in public ownership.

Today the Bureau of Land Management administers approximately 473 million acres of public land, but legislation now on the books will make a substantial reduction in that figure. At present we must be content with estimates, but it now appears that the final tally for the unappropriated public lands will be in the neighborhood of 250 million acres.

These are the lands covered under the new Federal Land Policy and Management Act. The Act is long and complicated, but the following is a summary of its major provisions. References to

specific sections are included in parentheses.

BLM Personnel

Under the Act future Directors will be appointed by the President with the advice and consent of the Senate. It is significant that the Act requires the Director to have a broad background and substantial experience in public land management. (301)

It provides for an Associate Director and Assistant Directors to be appointed by the Secretary of the Interior under the Civil Service System. (301)

All employees of the Bureau having financial interest in any action pertaining to the public lands are required to disclose that interest. (313)

Veto of Management Decisions by Concurrent Resolutions of the House and Senate

Several types of management decisions made by the Bureau must be sent to Congress for review and are subject to "veto" by concurrent resolutions of the House and Senate. Among them are:

Decisions eliminating one or more principle uses of land for two or more years on tracts containing more than 100,000 acres of public land. (202)

Decisions to sell tracts of public land in excess of 2,500 acres. (203)

Withdrawals of tracts of public land in excess of 5,000 acres. (204)

Disposition of Public Land

The Act prohibits the sale of public land to non-citizens or to corporations not incorporated under State or Federal law. (207)

It provides authority for the Secretary of the Interior to insert terms and conditions into patents to insure the proper land use and to protect the public interest. The Secretary is prohibited from inserting terms and conditions into land patents that violate existing State and local land use plans and programs. (208)

It provides for the reservation of minerals to the United States in public land sales, but allows for conveyance of such rights in certain specified situations. (209)

It requires the Bureau to notify

State and local governments of pending land sales in order to give them an opportunity to zone or otherwise regulate the use of the land before the sale. (210)

It authorizes the Secretary of the Interior to dispose of certain omitted lands without a survey. (211)

It amends the Recreation and Public Purposes Act by increasing the amount of land that the Bureau can sell or lease under its authority and allows some leases of land for recreational use without charge. It also requires public participation on all decisions to dispose of public land under the Recreation and Public Purposes Act, for the Secretary to determine that the land requested under the Act is to be used for an established or definitely proposed project, and the preparation of comprehensive land use plans and adoption of zoning regulations for disposals in excess of 640 acres. (212)

It amends the Unintentional Trespass Act to allow the rights of first refusal to persons having preference rights and the establishment of fair market value of such land as of September 26, 1973. (214)

Exchanges of Public Land

It provides for cash payments to equalize values when public lands are exchanged for private land provided the payment does not exceed 25 percent of the total value of the public land being transferred. (206)

Land Acquisitions

It provides authority for the Bureau of Land Management to acquire land where such acquisitions are consistent with the Departmental mission and with applicable land use plans, but it limits the use of power of eminent domain to certain specified situations in the acquisition of land.

It allows the Department of the Interior to use money from the Land and Water Conservation Fund to acquire land needed for the proper management of public recreation lands. (318)



It adds two areas to the King Range National Conservation Area. (602)

Management of Lands

The Act requires the inventory and identification of the public lands and provides authority for marking and mapping of these lands as funds and manpower are made available. (201)

It calls for comprehensive land use planning. (202)

It provides broad management authority under principles of multiple use and sustained yield in accordance with land use plans. (302)

It provides for a comprehensive long-range plan and an interim program for the California Desert Conservation Area. (601)

Public Participation

The Act calls for public participation in land use planning and other aspects of land management including public hearings, public meetings and the submission of written comments and suggestions prior to reaching management decisions in many areas of public land management. (202)

Individual Use of Public Lands

The Act authorizes the Department of the Interior to issue easements, permits, licenses and leases

including long-term leases to individuals for the habitation, cultivation and for the development of small trade and manufacturing concerns. (302)

Law Enforcement and Regulatory Authority

The Act provides for the enforcement of public land laws and regulations by Federal personnel or by appropriate local officials authorized by the Secretary of the Interior. (303)

It authorizes cooperative agreements between the Department and local regulatory and enforcement authorities. (303)

It authorizes the Secretary of the Interior to make rules and regulations pertaining to the public lands. (310)

Finance

It reasserts some provisions of the Public Land Administrators Act and authorizes the Secretary of the Interior to establish service charges and to require payment for the execution of applications and other documents pertaining to the public lands and to refund excess payments made to the Department. (304)

It authorizes the Department to forfeit payments made by contractors who fail to meet contract obligations. (305)

It establishes a capital working fund for the Bureau of Land Management. (306)

It allows the Secretary of the Interior to accept contributions. (307)

It allows the Bureau to renew contracts for aircraft used in survey and resource protection twice annually within each year without further competition. (303)

It requires specific authorization for appropriations for all BLM programs with requests to be made every four years. (318)

Domestic Livestock Grazing

It authorizes the Secretary to conduct a study to determine the value of domestic livestock grazing on the public lands so that he may establish an equitable fee. Grazing fees may not be raised until a report due within one year is submitted to Congress. It

prohibits any raise in the grazing fee for the year 1977. (401)

It provides for ten-year grazing permits and for two years' notice before any permit is canceled in order to use the land for another public purpose unless there is an emergency situation. (402)

It provides a formula for the distribution of funds collected from grazing fees. Fifty percent of all money collected will be used for range improvement programs. One-half of this money must be spent in the district or region where it is collected. The rest of the 50 percent may be spent in other areas at the discretion of the Secretary of the Interior. It also exempts the annual distribution and use of range improvement funds from provisions of the National Environmental Policy Act. (401)

It provides for the appointment of grazing advisory boards to advise the Secretary of the Interior on allotment plans and on the distribution of range improvement funds. (403)

It authorizes the use of helicopters in the administration of the Wild Horses and Burros Act. (404)

Minerals and Energy

It provides a formula for the distribution of funds collected under the Mineral Leasing Act of 1920 and under the Geothermal Steam Act of 1970. (317)

It authorizes loans to States and local governments to relieve social and economic impacts caused by mineral development. (317)

It requires persons now holding mining claims under the General Mining Law of 1872 to record those claims with the Bureau of Land Management. Failure to record claims will be considered evidence of abandonment. (314)

Other Features

It authorizes the Secretary to control mining to the extent that he can by regulation or otherwise, take actions necessary to prevent unnecessary or undue degradation of the land. (302)

It authorizes the Bureau to revoke use permits when the permittee violates certain laws. (302)

It prohibits unauthorized use, occupancy, or development of the public lands. (303)

It authorizes studies, allows the Secretary to enter into cooperative agreements and to accept contributions. (307)

It requires an annual report to be made on the public lands. (311)

It allows BLM personnel to enter into search and rescue operations. (312)

It allows the Secretary to make correction in patents and other public land documents. (316)

It provides broad authority to grant rights-of-way across public lands and to insert terms and conditions for their use. It allows cost sharing in financing the construction of roads and allows the Bureau to create rights-of-way corridors and to suspend or terminate the use of rights-of-way. (501-511)

It directs the Bureau of Land Management to complete a study of potential wilderness areas within 15 years. (603)

It repeals many of the old public land laws, including the Homestead Act for all States of the United States except Alaska where it will continue to be in force for ten years. (702)

Editor's Note: Although the Homestead Act is still in effect in Alaska, all land disposal actions there have been suspended by the Alaska Native Claims Act and will remain in suspension until the claims of Alaska's Native People are satisfied.

Although the Federal Land Policy Act is now the law of the land, some of its provisions cannot be implemented until the Department of the Interior has adopted implementing regulations. Interior officials say that this will take some time. However, under the provisions of the new Act all Departmental regulations will remain in force until replaced by the new regulations, and will serve as the basis for administration of the public lands until new regulations to implement the Act are adopted.

BLM's Blue Ribbon Recreation Site

A Sewerage Treatment Reservoir Proves to be a Winner

JOAN M. COMANOR

Carson City District

Camping beside a sewerage treatment reservoir doesn't sound appealing, but if the campground happens to be beside the Indian Creek Reservoir in California's Alpine County it could be one of your more enjoyable outdoor experiences for the season. Recently the reservoir was selected as one of 200 outstanding projects by both the Department of Housing and Urban Development and the American Revolution Bicentennial Administration.

Water for the 160 acre reservoir comes from a tertiary sewer system in the Lake Tahoe Basin. By the time the sewage reaches the reservoir it has been treated to remove harmful impurities. The treatment is so effective that the reservoir is open for swimming, fishing and other recreational activities.

The area is so in demand for outdoor activities that the South Tahoe Public Utility District and the Bureau of Land Management's Carson City and Folsom Districts have developed a campground, a day use area with boat ramp and picnic facilities, and environmental study area and eight miles of hiking trails to accommodate the recreationists.

In addition to the reservoir, which is stocked with rainbow trout, the campground is situated among three small natural lakes named Curtz, Summit and Stevens. There is easy access to the Carson River. Over 9,600 people used the 29 campsites the first year they were opened. The recreation area is located among

mixed pines at an elevation of 5,600 feet. Because of the elevation, the area is closed during the winter months when the roads are apt to be blocked by snow. Opening and closing dates depend on the weather, but generally the area is open from April through October which includes California's 23-day deer season ending the third week end in October.

There is a \$2 per night user fee for overnight campers. The camping facilities include 19 sites suitable for motor homes, pick up campers, travel trailers or tents. Ten additional sites along the shore of the reservoir are reserved for walk-in tent camping. Flush toilets and hot showers are available for all campers.

The ecology of the area is more fully understood by visiting Curtz Lake Environmental Study Area. Here three self-guided interpretative trails, built in 1972 and 1973 by the Bureau's Carson District Youth Conservation Corps, give the public an opportunity to observe and understand the area's environment. A vegetative trail, a soils-geology trail and an aquatic trail all interpret natural evolutionary processes. These interpretative trails are popular with organized school groups as well as the general public.

Hiking trails link the campground with the study area, the small lakes, and the river so that the visitor can easily enjoy all the area's attractions.

The area also has its history and its legends. Kit Carson led an expedition along the Carson River

prior to crossing the Sierra Nevadas on his way to Sutter's Fort in California in the winter of 1843-44. Alpine County was logged in the 1860s and 70s, and the logs were floated down the Carson River to become timbers in the mines of the Comstock Lode near Virginia City.

The grounds are now closed for the winter, but due to reopen in April. The area has proven popular with campers, and the Bureau is preparing to accommodate more than 13,000 campers. Total visitor use, including trail hikers and day users is expected to top 70,000 visits for the coming season.

So, if somebody suggests going camping on a sewer treatment reservoir, don't turn up your nose. It just could be an opportunity for an enjoyable and educational experience.



Good fishing attests to the quality of the reservoir's water.



*Ten Years Ago a Forest Fire Ravaged
the Oxbow Today the Scars are Being Healed.*

The Oxbow 10 Years

August 20, 1966.

JOSEPH C. DOSE
Chief, Division of Forestry

The sun was a copper cauldron in a brassy sky. It blistered and burned with an intensity that parched both men and vegetation. The humidity was low, and the forest of western Oregon had become a powder keg waiting for a spark to turn it into an inferno.

This explosive situation had been building slowly all summer. From late March 'til mid-June the rainfall along the coastal range had averaged a bare 30 percent of normal. In Eugene, there had been no measurable precipitation since July 2.

Everyone was deeply concerned. From the tinder-dry forest floor foresters cast wistful eyes at the sky, hoping for signs of rain. These were employees of the Bureau of Land Management, and they were no strangers to fire in the forest. They knew it to be a malevolent, temperamental thing that could spring to life in an instant; that with a favorable tailwind, it could race through the forest faster than a horse could run, and that even when it was seemingly dead, it could awaken to renewed life to spread havoc all over again. Fire was the enemy; they gave it no quarter, from it, they expected none.

In Salem, the State Forester had

issued fire season restrictions on May 31. The purpose of fire restrictions is to prevent the kind of activity in the woods that is apt to start a forest fire. Restrictions reduce the odds, but such efforts can never be 100 percent effective. On June 27 the weather continued to be dry, and the restrictions were strengthened.

The Salem Weather Office issued a "red flag" warning on August 17. That meant that the fire danger was extreme. Actually, the dreaded thing had already happened. At Ives Peak, a fire had broken out on Weyerhaeuser holdings on August 9. Prompt action brought it under control, but only after 1,636 acres had burned.

Any relief that might have been felt after the Ives Peak fire was short lived. On August 15 a second fire flared up on International Paper Company land along Russell Creek. That fire was also quickly brought under control after burning over 577 acres. But mop-up crews were still on the scene on August 20.

The twentieth was hot and dry, and a strong east wind was blowing. At Wolf Point Lookout a 50 percent drop in the humidity was recorded for the 24 hour period.

The Ives Peak and Russell Creek fires had emphasized the ex-

Later



A fire-scarred slope exposed to the erosive forces of the elements.



Time and the efforts of man are starting to heal the land. Young seedlings have established a root system and growth will now come fast.



treme danger. Foresters were urging a complete shutdown of logging operations throughout the area. Such a proclamation was issued to become effective at 1:00 pm on August 22. A bit later, that proclamation was rescinded, and the shutdown time moved back to midnight August 21. But it was already too late; by proclamation time the Oxbow fire was out of control.

What has become known as the Oxbow fire started on August 20, at approximately 1:36 pm. That was a Saturday, and most of the logging crews were already out of the woods because of the weekend and the impending proclamation closing down operations.

The weather report for the day was discouraging. Clear skies with temperatures between 80 and 90 were forecast. The humidity would be low — between 15 and 20 percent — but what was most discouraging was the prediction of winds from the northeast of 15 to 20 miles per hour that would increase to 30 or 40 miles per hour toward evening. That weather report, in light of the tinder-box condition of the forest, was a recipe for disaster.

Out along the Oxbow Road, employees of the Umpqua Navigation Company were operating a road roller. The Company was un-

The fire left the Douglas fir trunks scattered like match sticks spilled from the box.



der contract to the Bureau of Public Roads to pave a section of the road. At 1:36 pm three employees saw a plume of smoke rising from the edge of the road a few dozen yards behind them. They sent a fourth man for help and set out to fight the fire that then covered about a tenth of an acre.

They had only hand tools for firefighting, and any chance they might have had to contain the blaze was lost when the predicted wind started to blow in gusts of gale-like intensity. Instantly the blaze flared out of the control of the three men.

Meanwhile the man sent to find help had a bit of luck when he intercepted an International Paper Company truck with a two-way radio. The alarm was on the air by 1:45. By 1:55 the International Paper Company mop-up crew from the Russell Creek fire was on the scene, and a 15-man crew from the Western Lane Fire Patrol had arrived by 2:10. By then the fire had burned over two acres.

Whipped by high wind, the fire defied the efforts of the men to control it. At 2:40 the blaze had spread across 150 acres. More men continued to arrive but there was little they could do. The fire had started to crown along a 5-mile front.

Now the situation was more than merely out of control. A crown fire is where the foliage in

the crowns of the trees start to burn, as opposed to a ground fire where only the brush and litter on the floor of the forest burns. A crown fire is a killer, destroying all in its path. This fire was then throwing flame and sparks as much as two miles ahead of itself to start new fires in many directions. Men and equipment were now being evacuated from the area.

Fighting a large crown fire is something like going into battle. Fire is the foe, and its wind propelled blaze advances like a band of Tartars on an ever widening front. Against such a foe, men are helpless. The only thing that can stop the advance is a change in the weather or a lack of fuel.

Weather is critical. Hot dry weather favors the fire, and wind speeds the advance of the flames and makes the fire hotter. Conversely cool damp weather is the firefighter's friend, and rain is the greatest ally of all.

But weather is unpredictable. You hope for rain, but in the meantime you try to shut off the fuel. The best time to fight a fire is when it first starts. Then the line of flame is short, and the fire hasn't started to crown. Even after the fire has a good start, ground fires are easier to control than crown fires, and they are not as dangerous.

In order to be able to man a fire in its early stages BLM, the

Forest Service and State and local forest agencies have organized interagency teams with lookouts to keep watch for smoke. Smoke is the first tattletale warning of wild fire.

Hand in hand with the system of fire lookouts is a communications system, and behind the communications system are teams of trained firefighters. Behind the firefighters is a veritable arsenal of equipment and supplies.

Yet against such opposition the Oxbow fire had some impressive advantages. It had ignited in near perfect burning conditions. There was an abundance of fuel. It had a strong wind behind it, and it reached the crowns of the trees before any effective countermeasures could be mobilized to stop it.

Despite the fact that it was discovered almost immediately, and the word was out in a matter of minutes, the fire got the jump and grew into a monster before a sizeable force could get into action.

But once the system started to work, it was like an army moving to counterattack. Trucks brought men and supplies into position. Bulldozers started through the forest plowing firelines while men followed to light backfires. When the backfire meets the main fire, both go out because of a lack of fuel. Aircraft flew in to dump fire retardant just ahead of the flames. No one expected this to put the fire out, but it slows the advance of the flames to give others time to get the backfires going.

It was an army that moved against the Oxbow flames. Even so, it took eight days to bring them under control. Then it was time for an accounting.

The fire had burned over 43,368 acres. Of this more than 24 thousand acres was saw timber. In crossing through the burn after the fire, one BLM forester noted that in some places the fire had been so hot that it was now completely out because nothing was left to smoulder.

Land in the burned-over area lies in a checkerboard ownership pattern. BLM, State and private lands are intermingled. The fire had burned across property lines

without partiality, but because the public, through BLM, is the larger landowner in the area, it had suffered the greater loss. International Paper Company was the second largest landowner. Over 14 thousand acres of its land was burned.

There was really no way to assess the damage. Too many intangibles were involved. It was estimated that it cost more than \$900 thousand and 75,600 man hours to bring the fire under control. One life was lost.

When the fire was completely out, BLM's work was just beginning. When a crown fire sweeps through standing timber, it kills mature trees, leaving them shorn of all foliage. Their charred trunks are left standing as mournful sentinels or lie scattered about over the ground like match sticks poured from their box. Only in the very hottest spots are trunks completely consumed. For the most part the tree's sap keeps the inner wood from burning.

It was this charred timber that was the immediate concern of BLM foresters. Experience has proven that such timber provides almost ideal conditions for fires to start again.

As the foresters came off the fire line, they were being assigned to the task of mapping the burned area according to ownership, to computing the scope of operations needed to salvage fire-killed timber, making plans to rebuild roads and bridges and later to replant the bare slopes with new trees.

As the smoke cleared, airplanes took off to take aerial photographs of the burned areas. This provided the accurate data needed to determine the scope of salvage operations.

The aerial survey showed that there was enough salvagable timber in the burn to house the population of a town the size of Birmingham, Alabama. Salvage became a high Bureau priority for the west coast of Oregon. On Monday, August 29, the same day the fire was officially declared under control, the BLM Oregon State Director issued directives to guide the salvage operation. The



The old and the new. In this picture the fire blackened stumps contrast with the vigorous green seedlings. Together they tell the story of ruin and recovery.

Bureau would offer 180 million board feet of salvagable timber for sale by July 1, 1967. All the salvage timber would be offered by the end of the year.

This was a tall order. It meant an increase in the sale volume for the Smith River Management Unit by 330 percent over the annual allowable cut for the coming year. In normal times timber sales are scheduled to help meet the demands of the market on a sustained yield basis. Before any sale, BLM foresters cruise the potential sale area and determine the volume of timber that can be harvested. Using this data, they then determine an appraised value for the lot so that the Government is assured of fair market value for the timber sold. Now with a proposed sale volume better than three times the normal, all pre-sale activity had to be increased accordingly.

One immediate concern of the BLM foresters was that the timber industry would not be able to promptly cut and process the great volume of fire-killed and damaged timber that needed to be removed from the Oxbow area. Many of these companies had already bought large volumes of green timber in other areas. At that time contract specifications required the company to complete its harvest from the sale area within a specified time (up to 30 months) from the date of the

sale. In order to encourage these companies to shift their harvest operations from green to fire-killed timber, the Bureau offered those operators who bought salvage timber additional time to harvest their green timber already under contract.

It was also necessary to plan and build new roads and bridges as well as to repair old ones damaged by the fire in order to harvest and haul the damaged timber to market. BLM engineers supervised the construction of 96 miles of road at a cost of \$3 million.

The first sale of salvage timber was held in November, 1966. The last was held in December of the following year. By that time 509.77 Million Board Feet of timber had been sold for \$20,967,404.

The industry had responded well to the incentives and had shifted their operations to participate in the massive salvage effort. The one-half billion board feet of fire-killed timber had been completely harvested by the end of 1969. Many companies and many individuals had participated in the sales. Bidding had been brisk and highly competitive. At the peak of the harvest operations, the sale roads had been busy as the massive logging truck hauled logs from the Oxbow to mills all across western Oregon.

In addition to getting the damaged timber on the market be-



A logging truck, dwarfed by the mass of the mountain, hauls logs to the mill.



Today the oxbow is green again.

fore insects and decay could cause further damage, the salvage effort had removed a serious fire hazard. While the sales were in progress other steps were being taken to insure against another fire of similar proportions in the same area. In the course of this operation BLM people had built 52 miles of fire trail and dug 5 reservoirs and 25 water holes.

BLM employees had worked with an esprit de corps that had earned them a Departmental citation, but there was still more to come.

In Oregon, forests grow on slopes that are steep, and some approach the vertical. Through the centuries, the forest has been a major factor in stabilizing the soil. Now that its protective cover had been burned away, the soil lay exposed and vulnerable. It was imperative that the Bureau make every effort to establish a protective cover as soon as possible. The Bureau was also anxious to get the burned-over area reforested as soon as possible.

The first thought was to seed the area with annuals to protect the soil during the critical period while a new forest was getting its root system established and its foliage was reaching out to provide an umbrella against the explosive force of falling rain. But an even more immediate problem was the explosion of the rodent population.

Wildfire is especially destructive of most animal life, but the Oxbow fire had little effect on the rodent population in the area. This may have been because the rodents live in burrows and the fire swept overhead too fast for

the deep-earth temperatures to get high enough to destroy them. If so, once the flames had passed they emerged to continue their life cycle as best they could in a blighted land.

With all other sources of food destroyed, the rodents started to devour Douglas fir seed with ravenous appetites. This abundance of seed was in one sense a direct result of the fire itself.

As the flames swept through the trees, heat caused the mature seed-cones to open and release literally billions of seed. Thermal up-drafts from the fire lifted the seed above the searing heat and held them in suspension while the fire burned out and the ground cooled. After the fire was out, these seed settled back to earth, a potential regenerative force to heal the scars of the fire, but also the only source of food for the teeming rodent population.

Not only were the rodents a threat to nature's regenerative efforts, they would make no distinction in the seeds scattered by the foresters in their efforts to reseed the area.

In an effort to bring the rodent population under control, grain treated with 1080 was prepared as bait. (Note: 1080 has since been banned for use on the public lands and would not be used today.)

BLM hoped to scatter the treated bait, the annual seed and tree seed from the air, and contracts were issued to private firms to carry out this work. Inclement weather and other factors prevented this plan from being fully implemented, and the bait and the annual seed were never scat-

tered in some areas. All areas received tree seed from the air or seedlings that were planted by hand. Until the end it was hard, tedious labor that started the Oxbow lands on the long road to recovery.

The fire gave BLM its first opportunity to manage a burned-over area intensively. The removal of the fire-killed timber and the construction of fire breaks have so far effectively prevented a second outbreak of fire. Soon the stands of young Douglas fir trees will be ready for pre-commercial thinning. Some trees will be removed to provide approximately 12 feet of spacing between each of the trees left standing. This will give the standing trees growing room and is something like thinning carrots.

In another 25 years the forest will start to provide useful wood products for our growing social needs.

Today, 10 years later, the watersheds have healed, fish have returned to the streams and birds and animals find food and cover among the young trees and the annual plants that abound. The Oxbow is green again. Seedling trees, now as high as a man's head, have bound the soil into place with countless miles of hair-root tentacles and fresh green foliage hides the scars of ravage. People have returned, too. They now come to hunt, fish, camp, pick berries or enjoy many other kinds of outdoor recreation. Because of the fire, years of timber production have been lost, but restoration is well on its way.

DAN C. B. RATHBUN

District Manager, Las Cruces District

A Family Vacations in the Alamo Hueco Mountains of New Mexico

A Few Days Spent With Yesterday

We were about a mile from where we planned to camp when we got our introduction to the unique wildlife in the area. Standing in the road, about 25 yards ahead of us, was a javelina. There was a lot of brush on either side of the road, and the javelina — a type of wild hog also called a pecary — had run out from a small drainage on the right. It stopped only long enough to look at us and then took off again. We drove down to the spot where we first saw it and stopped. About 20 yards away we could see it trotting away with no particular signs of alarm. Although common in Texas and parts of Arizona, javelina are on the upper limits of their range in Southwestern New Mexico.

The ranch house, the spring and the old rock corral tell a vivid story of the life-style that still characterizes the west.



Our destination was Dog Springs at the south end of the Alamo Hueco Mountains. We had picked this area because of the unique combination of historical, archaeological and natural values. The scenery is outstanding, and there has been very little change in the general character of the area since the boundary survey in 1855.

Even though the deed to the land around the springs wasn't issued until 1889, the ranch house at Dog Springs was built in 1881. The cement steps leading up to the large covered porch reflects some of the history of the area and stimulates the imagination of even the most unromantic. They were poured in 1911 when the house was expanded. Tuburzio Lujan scribed his name and the date "Julio 12" on the top step. On the two bottom steps are the years 1881 and 1884 and the name L. H. Brown, and on the third step is the year 1900 and a brand. The New Mexico Brand Book does not indicate the present owner.

All of these dates mark a very turbulent period for this remote corner of New Mexico. Only a mile from the international boundary with Mexico, the house was built when the Chiricahua's and Jacqui's were raiding ranches and harassing commerce along the Butterfield Trail to the north. The courage of the occupants was often tried as they scanned the horizon for the dust of hostile Indians. The house is only 50 miles from the place where Geronimo surrendered in 1886. Thirty years later in March 1916, Francisco "Pancho" Villa made a daring attack on the military detachment at Columbus, New Mexico, 50 miles to the northeast. Rustling and raids across the border by armed bandits continued for a number of years. Even today there is still an element of danger in this seemingly quiet land. The U.S. Border Patrol maintains surveillance of the area to reduce the flow of narcotics and illegal aliens into the U.S. Mindful of recent problems along the border, we



The front steps of the Dog Springs Ranch House. They date activities of those who have lived and built here since 1881.



Hidden away in a near-by cave this primitive buffalo was drawn by an Indian who occupied the site long before the white man arrived in the area.



A youthful camper examines holes worn in solid rock by Indians as they ground their seeds into flour. About 8 inches in diameter, some of the holes were worn completely through the rock, a depth of almost 20 inches.

took special precautions in selecting our camp sites. We had left word of our route and had checked in with the Border Patrol and Drug Enforcement Agency prior to going into the area. Although we were not aware of it until after our trip, they had checked on us twice during our stay; once by air and once from a distance at night.

The old rock corral near the ranch house, serves as further testimonial of the difficulty of the times and the stamina of the ranchers that pioneered the area. A perfect circle, the corral wall is about 2½ feet thick at the base and stands at least six feet high in most places. Rocks were more abundant than wood and wire. When we climbed the steep hill behind the house we could see the faint outline of a much larger rock wall enclosing nearly 2 acres in a rectangle. Many a vacquero and mustang horse tested one another in that corral. In the quiet

breeze we could almost hear the horse's cry as he fought his first taste of a bit and felt the weight of the rider. The vacquero's companions probably sat on the wall and cheered him as long as he rode the animal. Knowing that their shouts would turn to unsympathetic laughter if he was thrown, the vacquero gave it his all.

As we walked around the area, we found an abundance of rusty iron, purple glass and a few scattered pieces of broken Indian pottery indicating a much older occupation of the area.

Perhaps the most intriguing find was a broken Dutch oven lid, the brass wick holder from a kerosene lantern, and six empty shells, all within a few feet of each other.

Along with this were the metal bands from two old wooden water barrels. Did some water party fail in their attempt to drive Indians away from the spring? Was a chuck wagon surprised by

bandits? Even though these few scraps are minor compared to other archaeological and historical discoveries in the area, we left everything as we had found it. To us, finding them was very exciting and released our imagination to make up our own story. If we disturbed anything, we would be denying the next visitor the same thrill of discovery and imagination we had experienced.

That evening we moved out away from the spring to set up our camp. This is the only water for several miles and we didn't want to disturb the wildlife. The next morning we cooked our breakfast over an open fire, using our own Dutch oven to prepare biscuits. Perhaps that's what the empty shell cases we found the day before were about; not enough biscuits for all the cowboys on the roundup. On the other hand, if the biscuits were like the first batch we ever made in the Dutch oven, some cowboy may have shot the cook in self-defense.

Our next camp was near an old Indian village. Pottery and other artifacts collected in the area by archaeologists indicate occupation by several cultures beginning approximately 3000-5000 years ago. In 1960 a net 5 feet high and 151 feet long made entirely of woven human hair was found in a cave in the Alamo Huecos. Since neither the net nor the woven basket which held it showed any signs of use, archaeologists speculate that it was hidden for ceremonial reasons. The net is now on display at the Museum of New Mexico in Santa Fe. Fragments of other nets indicate they were set on land similar to fish nets, and small animals were driven into them for food. Weaving yucca and other fibers was, and still is, a major aspect of the southwestern Indians' culture. However, artifacts of this type are extremely rare because of their perishable nature. Were it not for a few dry caves in the area, a significant portion of the cultural puzzle of these early inhabitants would have perished with their woven wear.

The old village near our campsite is marked by a few scattered flint chips and an occasional fragment of broken pottery. On the north end of the village, we found a large rock containing several holes about eight inches in diameter. The holes were used to grind and pound hard seeds into flour. Two of the holes had been worn completely through the rock, a depth of nearly 20 inches. We found similar holes in rocks about a quarter mile to the south. The view of the mountains from the rocks was spectacular. As we looked back at the mountains there was no doubt that the Indians had an appreciation for the view, as well as recognizing the practical aspect of watching the horizon for less friendly neighbors.

As we drove around to the north side of the mountains, we stopped several times to identify the different birds of prey we saw. We had planned our trip around the late October migration and were impressed by the variety in such a small area. Some eleven different hawks and four species of falcon spend some portion of their annual cycle here. Two BLM wildlife biologists made one of the last sightings of the rare Aplomado falcon near these mountains. Southern New Mexico and Arizona host the largest concentrations of wintering birds of prey in the United States. At this time of year it is not unusual to see both winter and summer residents. The nights were in the low fifties and the days were in the high seventies. The first frost was still two or three weeks away. Marsh hawks and Harris' hawks are common in the area. Roadrunners, Gambel's, scaled and Harlequin quail and mourning and white-winged doves are also quite common. The most surprising birds we saw were at a live-stock reservoir on the west side of the mountains. Eight Mexican ducks were feeding on moss on the far side of the pond when we first walked up. As soon as they saw us they took off and flew in a large circle. When they had some



Breakfast time. Every camper knows that food cooked over open fire has a flavor that cannot be duplicated in the finest kitchen. The biscuits were cooked in a dutch oven that dates back many years. Coffee, eggs and bacon complete the meal.

altitude, they flew right over us. They made another pass and then landed again on the far side of the pond. The Mexican duck is rare in the United States. It resembles the common mallard, except that both male and female have identical plumage.

A wide variety of mammals occurs in the area, although we saw only one javelina, some rabbits, squirrels and a coyote. Both desert mule deer and Coues' white tail are common. Bobcats and mountain lions are also found here. The habitat is much like that found in the desert area of northern Mexico where jaguar and agarundi occur. However, the last sighting of either in New Mexico was in the Big Hatchet Mountains 20 miles to the north several years ago. Coatimundi are common, though they are seldom seen due to their nocturnal habits.

On our last night we camped at Pierce Well on the north side of the mountains. In the morning a strong breeze blowing down the canyon turned the windmill sail around, pointing the fan into the wind. The squeak as it changed direction gave an eerie presence to the low stir of the wind. As the breeze grew stronger the fan began to turn, slowly at first, then faster. The rhythm of the sucker rods and the sound of the mill pumping water up the pipe was a pleasant interruption to the solitude to the sunrise.

Until now we hadn't heard any coyotes, although we had seen one on our way over from Las Cruces. Now their serenade accompanied by the melody of the

windmill made an unforgettable memory for all of us.

Before breakfast we walked up to a small cave on the side of the mountain. On the back wall of the cave was a blackened painting of a large buffalo about five feet tall. Between the buffalo's horns was a smaller buffalo. The figure of a small man with limbs bent at right angles at the knees and elbows was holding the tail of the buffalo. Near the mouth of the cave were several red painted symbols. The meaning and purpose was a complete mystery to me. However, the patient detail that went into the drawing indicates considerable devotion on the part of the artists. We will never know if it brought what they sought. The artists have long since passed away, and only the dust of the cave floor has the full story. I had heard of the cave from co-workers in the Las Cruces District Office. It is protected only by the remoteness of the area and the integrity of the visitors that go there. To all of us, this was the highlight of our entire trip.

The remoteness of the Alamo Hueco Mountains and the relative lack of intrusion by modern man make the area valuable for studying history, archaeology and natural sciences. Perhaps if we understand the relationships between plants, animals, the soil, the climate and other natural features, we can make more knowledgeable decisions in allocation of these natural resources. We hope our two small children, who went with us, will learn to appreciate this heritage.

The Second Winning of the Northwest II

*From the Defeat of General Harmer to the
Appointment of Mad Anthony Wayne as
Commander of the United States Army*

PAUL HERNDON

Office of Public Affairs

The defeat of General Harmer brought renewed Indian attacks against all western settlements. The Indian's custom was to wage war during the Spring, Summer and Fall and then to return to his village for the cold winter, but in 1791 they struck the settlements during the first week of January. These attacks were especially vicious, and there were new atrocities to enrage the settlers.

The impact of the Indian raids on the frontier community during this period is hard to overstate and almost impossible for us to imagine today. At no other point in our National history was the westward movement so nearly brought to a standstill. The fact that it was not is due entirely to the indomitable will of the individual settler.

In his "Ark of Empire" Dale Van Every says:

"There were instances of men marrying and remarrying as they lost a session of families while they always unaccountably survived. There were more usual instances of women bearing successive broods of children to suc-

cessive husbands. Few families' fortune was so favorable as to enable them to permanently escape catastrophe. The spectacle of a man dying in natural causes in his bed was regarded with special solemnity because it seemed so uncommon."

The toughness and fiber that enabled the settler to survive against such odds was not confined just to the men. The women they brought into the wilderness were fully their equal. An admiring contemporary of Rachel Donaldson describes her in her youth as "as gay, bold and handsome a lass as ever danced on the deck of a flatboat or took the helm while her father took a shot at the Indians."

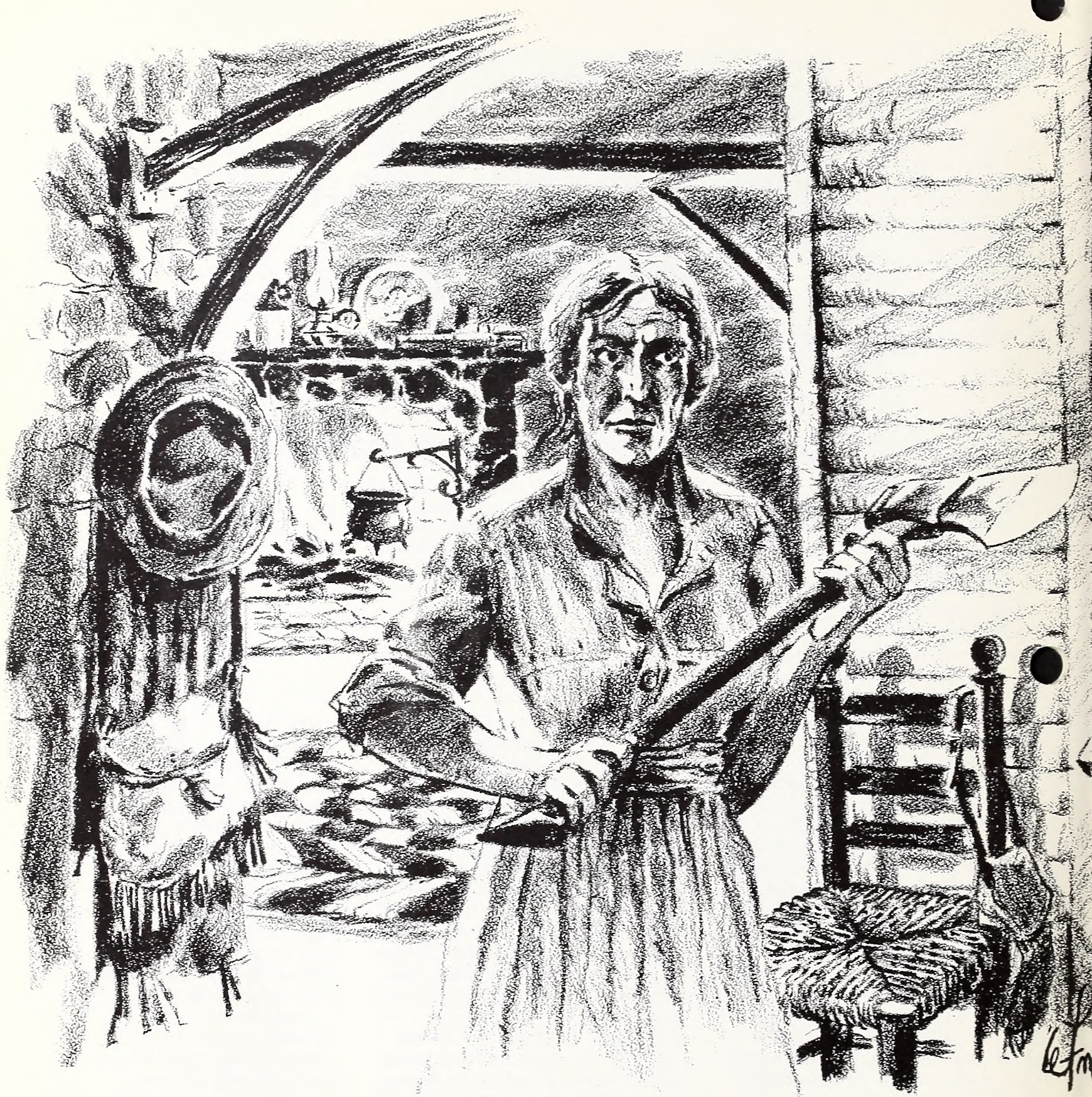
Beauty without guts did not survive on the frontier. In crisis, pioneer women were forced to make decisions that stagger the mind and would drive the modern individual to insanity. There are countless incidents during this period where women in a moment of sudden attack sacrificed a child or husband to save the rest of her family.

These women did more than

stand behind their men. When necessity demanded they also fired the rifle and wielded the ax. One story serves to illustrate the courage and determination of the pioneer woman.

A settler named Merrill was wounded by the first volley of fire as Indians attacked, but he reached his cabin and managed to bar the door. Thinking that they had cornered an easy victim, the Indians hacked away at the door until they made an opening large enough for a man to crawl through. Inside the cabin Mrs. Merrill picked up the family ax and prepared to defend herself, her children and her wounded husband. As each Indian crawled through the opening, she split his skull until there were four dead Indians inside the cabin.

She then realized that Indians had climbed up on the roof and were trying to get inside by climbing down the chimney. She countered this by throwing the contents of her precious feather bed onto the fire. Two Indians were overcome by the fumes of the burning feathers and fell onto the hearth where Merrill killed them



with a stick of firewood. By now the surviving Indians decided that the attack was proving too costly and withdrew.

What enraged the settlers as much as the Indian attacks was the fine hand of Great Britain that could be seen behind all the efforts to drive the settler back across the Mountains. In Decem-

ber of the previous year, all the tribes had sent representatives to a meeting called by Alexander McKee. McKee was the British Indian Agent for Canada. He had always urged the tribes to stand firm against the encroachments of the American settlers. He continued these urgings at the December meeting and promised

British assistance and support of the Indian effort in every way except actually declaring war on the United States.

The Indians were not hard to convince. It was the message they wanted to hear and their success against the troops of General Harmer had boosted their morale and made them confident of victory.



ernor of the Northwest Territory, was recommissioned as a Major General in that army. That was the same rank he had held as an officer in the Continental Army. Along with his commission, he was authorized to prepare for an attack against the Indians.

In the meantime efforts to negotiate a settlement were intensified. When the first negotiations broke down, Secretary Knox asked New York's Governor Clinton to entreat with Joseph Brant to intercede on behalf of the Americans.

The United States was not alone in seeking the good offices of Joseph Brant. At almost the same time he was being approached by Lord Dorchester, the British Governor of Canada. Dorchester wanted Brant to use his influence to further the British interest in the Northwest. Brant listened to both Clinton and Dorchester, but his only interest was whatever was good for the Indians. Still he was much too astute to be fooled by the Indians' success over Harmer.

Early in the summer he met with the Tribes at Sandusky and Detroit. His message was the same. He pleaded with the tribes to unite, but to also reconsider their determination to make war on the Americans. Over and over he warned that it was a fight the Indian could never win.

Brant left the conference confident that he had persuaded the Indians to heed his advice. Any success he had was only for the moment, the will for peace was weak and soon a detachment of Kentucky militia ruined it all.

The civilian militia that so dominated the military picture of the day was the bane of every military commander and just as often the despair of the politician and the diplomat. The enthusiasm for citizen militia was born of the citizen's distrust of large standing armies. The British had posted large armies in the colonies before and during the Revolution. That experience had soured the Americans to the point that their attitudes were carried over into the

post war era. Public opinion was solidly against a large military force controlled by the Federal government. In light of this opposition, a militia manned by civilians and subject to local control was the logical solution.

On the western frontier, the militia was made up of settlers who signed up for short periods of service. Almost without exception these units received little training and had even less discipline. It was a breach in the discipline of the militia that had been responsible for Harmer's defeat. Now it was that same militia that scuttled all chances of an agreement between the Government and the Indians.

The Kentucky militia had returned from the Harmer campaign smarting from their disgrace. In two confrontations with an Indian force they had fled in panic, now back in their cabins and subjected to punishing raids from across the Ohio, they yearned for redemption.

In May of 1791 a force of approximately 1,000 men crossed the Ohio and marched against Indian villages on the Wabash River. They met no resistance, and after burning a few villages and taking a few prisoners, they returned to Kentucky. In July a second force crossed the Ohio. They killed or captured a few Indians before returning home. The two expeditions had achieved no military objective, but they had confirmed the belief of the Indians that the Americans were bent on aggression, and the tribes renewed their determination to strike back.

After his victory over General Harmer, Little Turtle was made War Chief of the Miami Tribe. The Miamis were at the forefront in the confederation of tribes to repel the settlers. Little Turtle's father had also been a Miami chief, but his mother had been a Mackican. Since the Indians counted lineage through the mother, Little Turtle was considered a Mackican. Nevertheless, the Miami had elevated him to the position of chief at an early

During the meeting with McKee, the militant factions hooted down the few remaining advocates of peace among the tribes.

The renewal of attacks that followed that meeting forced Congress to recognize the seriousness of the hostilities, and it voted money and men to bolster the army. Arthur St. Clair, then gov-

age. He had been just under fifty years of age when he won his victory over Harmer. As a military strategist, most historians rank him a close second to such Indian military greats as Pontiac and Tecumseh.

Little Turtle made no effort to punish the Kentucky raiders. He considered their raids as little more than bee stings, and he was perfectly willing for the Kentuckians to whip up the fighting spirit of his warriors. He had correctly guessed that the Indians' real threat would come from St. Clair's forces, and it was there that he kept close watch.

St. Clair was having no better luck in preparing for his campaign than General Harmer had. The same private contractors were still delivering supplies late and in insufficient quantity. Kentucky sent him 300 men of the thousand he requested. Many of these men arrived at the end of their enlistment period and were therefore useless for the campaign. Neither men or officers in both the militia and the regular army were well trained.

St. Clair's plan was to move north slowly, building a string of forts as he went. It was a sound plan, but his men complained that they had signed up to fight, not to build forts. Many deserted. By the time St. Clair pitched his camp on the tributary of the Wabash River, his ranks had been so depleted that he only had about 1400 men.

Here St. Clair set about to establish a strong camp. His regular troops occupied easily defended ground near the river. Since there was not enough ground to accommodate all the troops, some of the militia were sent across the river to camp.

Some of the troops had been sent away. Among these were the Chicksaw scouts that had guided the Americans through the woods. Before they had reached the camp site, St. Clair had sent them out to raid the enemy and take prisoners. He hoped to learn more about the enemies intentions by questioning the prisoners. He had also sent a detachment of his best troops back along the trail to guard his supply train against

theft by deserters from his own army.

If things were going bad for St. Clair, luck had smiled on Little Turtle. The British had opened their armory, so that his men had an abundance of arms and ammunition. All the Northwest tribes had sent warriors to fight with the Miamis. Little Turtle's forces now outnumbered the Americans. The British Indian Agent, Alexander McKee and a number of British officers accompanied the Indian forces. Tecumseh was in charge of the scouting party. He had reported every move the Americans had made since leaving Fort Washington.

Now under cover of night, Little Turtle moved his men into position. Then in the early dawn, just as St. Clair's troops were being dismissed from their morning parade, Little Turtle launched his attack. The first blow fell on the militia camped across the river. Following a scenario that was now becoming routine, the militia panicked. Frightened because of their isolation, they stampeded across the river and into the camp of the regulars. The stampede, the rifle fire and the war whoops of the Indians threw all the troops into a state of confusion. When order was eventually restored, too much damage had already been done.

The Indians' rifle fire was cool and deadly. Americans manning the cannon and officers were special targets for the Indian sharpshooters. Before the day was over, St. Clair had six bullet holes through his clothing, but the fact that the attack came in the early morning, before he had put on his officer's tunic, probably saved his life.

The regulars fought well, but at the end of three hours it was evident that the position could not be defended. St. Clair ordered a retreat. A bayonet charge opened a hole through the Indians' line, and the remaining troops broke through.

The retreat soon became a rout. In their panic, men threw away their rifles so that they could run unimpeded.

It had taken a full month for the troops to march the one hun-

dred miles from Fort Washington. The fleeing soldiers made it back in a matter of days. Out of a total of 1400 men, St. Clair had lost 913; of these 68 were officers. Had the Indians not stopped to strip the dead and torture the prisoners and wounded, the entire army might have been annihilated.

The Indians were ecstatic over their victory. Attacks against the entire frontier were intensified to a point where westward expansion was threatened as it had never been threatened before nor was ever threatened since.

Before St. Clair's defeat, Indian raiders had always avoided the heavily populated districts, but now they struck at the outskirts of Lexington, Danville and Herrodsburg. In Kentucky, several men were killed when a war party slipped near enough to fire into a crowd that had gathered to witness the inauguration of the State's Governor. Even the residents of Pittsburgh became frightened and they petitioned the Governor of Pennsylvania for help in getting ready for an Indian raid.

The Indians' confidence was fully shared by the British in Canada. There, it was generally assumed that the Americans would never again have the strength nor the will to conquer the Indians. Many Americans agreed.

Throughout the fifteen states men were asking if it was really worth so many lives to possess the western lands. Washington believed that it was, and he persuaded Congress to provide the money to rebuild the Army. Congress was reluctant, but eventually it authorized a new army of 5 thousand men.

As result of his defeat, St. Clair had resigned his commission, so a new Army commander had to be appointed. On April 3, 1792 President Washington named Anthony Wayne as the new commander of the United States Army. It was not a popular choice and there was an immediate outcry. Newspaper and political figures voiced their concern over the fitness of the new commander. Even Washington had moments of doubt.

Public Land Sales

BUREAU OF LAND MANAGEMENT

ALASKA:
555 Cordova St.
Anchorage, Alaska
99501
District Manager
P.O. Box 1150
Fairbanks, Alaska
99701

ARIZONA:
Federal Bldg.,
Room 3022
Phoenix, Ariz. 85025

CALIFORNIA:
2800 Cottage Way,
Room E-2841
Sacramento, Calif.
95825

COLORADO:
1600 Broadway
Room 700
Denver, Colo. 80202

IDAHO:
Federal Bldg.,
Room 334
550 W. Fort St.
Boise, Idaho 83702

MONTANA (N. Dak.,
S. Dak.):
Grant Tower
222 N. 32nd St.
P.O. Box 30157
Billings, Mont. 59107

NEVADA:
Federal Bldg.,
300 Booth St.
Reno, Nev. 89502

NEW MEXICO (Okla.):
Federal Bldg.
P.O. Box 1449
Sante Fe, N. Mex.
87501

OREGON (Washington):
729 Northeast
Oregon St.
P.O. Box 2965
Portland, Oreg. 97208

UTAH:
University Club Bldg.
136 E. South Temple
Salt Lake City, Utah
84111

WYOMING (Nebr.,
Kans.):
2120 Capitol Ave.
P.O. Box 1828
Cheyenne, Wyo.
82001

EASTERN STATES (All
Other States):
7981 Eastern Avenue
Silver Spring, Md.
20910

OREGON

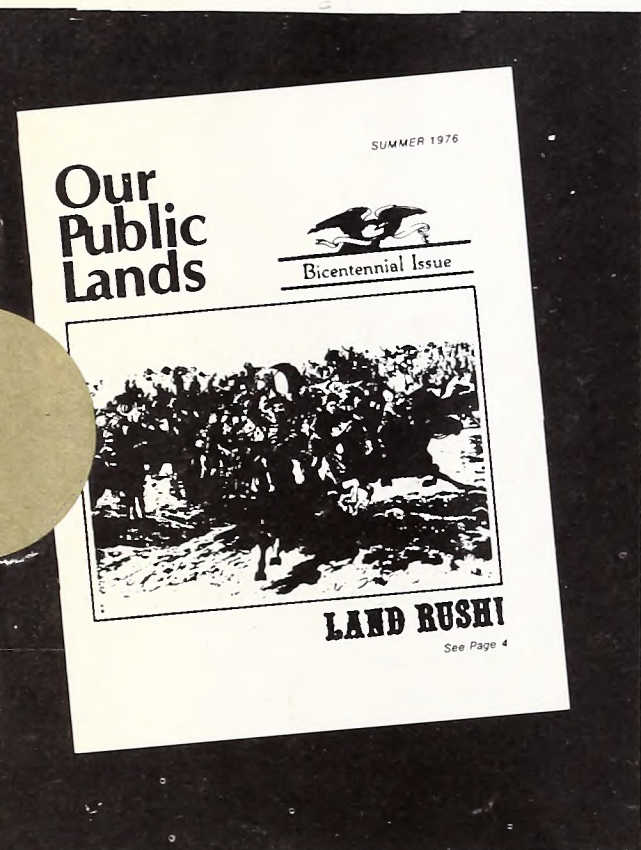
Two isolated parcels, each 40 acres. Eighteen miles south of the Columbia River in Gilliam County. Suitable for livestock grazing. Legal access. Appraised value \$1,300 and \$1,400. For further information write to Oregon State Office. Refer to OR 12658. Sale February 1.

This is a compilation of the most up-to-date information possible on up-coming sales of public lands by State Offices of the Bureau of Land Management. For details of land descriptions, prices, and other information pertinent to sales, you must write the individual State Office concerned. In most cases, there are adjoining land-owners who have statutory preference rights and may wish to exercise them to buy the land. Sales notices will point out, insofar as possible, problems relating to (1) access, (2) adjoining owner preference rights, (3) small-tract sales limitation of one per customer, and other pertinent information. When possible, all sales are scheduled far enough in advance so ample notice can be given in Our Public Lands. Sales listed can be canceled on short notice for administrative and technical reasons. A listing of BLM State Offices with addresses is found on the opposite page.

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